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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,372	06/25/2007	Dan Lundgren	NOBELB.303NP	8124
20995 7590 10/30/2009 KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614				
EXAMINER				
LEWIS, RALPH A				
ART UNIT		PAPER NUMBER		
3732				
NOTIFICATION DATE		DELIVERY MODE		
10/30/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/591,372

**Applicant(s)**

LUNDGREN, DAN

**Examiner**

Ralph A. Lewis

**Art Unit**

3732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 7/15/2009; 7/31/2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 6, 7, 10, 11 and 17-91 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 7, 10, 11 and 17-91 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 July 2009 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 7/15/2009
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **Acknowledgement of Request for Continued Examination**

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 15, 2009 has been entered.

### **Objections to the Drawings**

The new drawings filed 7/15/2009 are objected to under 37 CFR 1.121(d) as being misidentified as a "replacement sheet" when they are in fact new sheets of drawings containing new additional Figures from those Figures originally filed. The newly submitted Figures must be submitted on sheets labeled along the top margin as "New Sheet".

Additionally, the new drawings filed 7/15/2009 are objected to under 35 U.S.C. 132(a) because they introduce new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The original disclosure does not support the thread/groove coarseness, height, spacing, shape and pitch as specifically illustrated in the newly filed drawings. Applicant is required to cancel the new matter in the reply to this Office Action.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “bridge” of claims 40, 53 and 81; the “key engagement” of claims 50, 64 and 91; and the dental implant having first, second, third and fourth inner surfaces as required by new independent claim 65 must be shown or the feature(s) canceled from the claim(s).

Deletion of the claimed subject matter or corrected drawings showing the subject matter are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance. No new matter should be entered.

### **Objections to the Specification**

The specification is objected to under 37 CFR 1.77(c) for lacking the section headings.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). The specification provides no apparent basis for the “first inner surface” and “second inner surface” language used throughout the claims; the “third inner surface” and “fourth inner surface” language of new independent claim 65; the “bridge” of claims 40, 53 and 81 and; the “key engagement” of claims 50, 64 and 91.

**Rejections based on 35 U.S.C. 112, first paragraph**

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 40, 50, 53 and 64-91 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement and written description requirements. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In regard to claims 40, 53 and 81, the originally filed specification provides no apparent support for the newly claimed "bridge" limitation. The limitation constitutes new matter.

In regard to claims 50, 64 and 91, the originally filed specification provides no apparent support for the newly claimed "key engagement" limitation. The limitation constitutes new matter.

In regard to claims 65-91, there is no apparent basis in the originally filed application for the claimed dental implant having first, second, third and fourth inner surfaces as required by the new independent claim. The examiner is at a loss as to what disclosed structure applicant is attempting to claim and the specification which lacks the claim terminology is of no assistance. More particularly, surfaces 1 and/or 2 in applicant's Figure 1 could reasonably be interpreted alone or together as the claimed first inner surface and surfaces 2 and/or the horizontal surface above 2 could

reasonably be interpreted alone or together as the claimed second inner surface, however, there is no reasonable basis for a third concentric inner surfaces with transverse intersecting fourth inner surface.

**Rejections based on 35 U.S.C. 112, second paragraph**

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 23-36, 42 and 51-91 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 23 and 65, the limitations that “the external surface including threads that extends [sic] along the external surface in a longitudinal direction” and “the threads on the external surface extends [sic] longitudinally towards the apical end” are somewhat confusing because they seem to suggest that the threads run vertically up and down the vertical/longitudinal length of the implant.

Claim 42 is a duplicate of earlier claim 21.

Claim 56 is a duplicate of claim 35.

Claim 83 is a duplicate of claim 77.

In regard to claims 65-91, the examiner is at a loss as to what disclosed structure applicant is attempting to claim with limitations directed to the first, second, third and

fourth inner surfaces of the implant as required by the new independent claim. The written description which lacks the claim terminology is of no assistance.

### **Obvious-type Double Patenting Rejections**

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-4, 6, 7, 10, 11 and 17-91 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-11 and 22-28 of copending Application No. 11/035,266 and claims 1-20 of copending Application No. 10/587,497.

Although the conflicting claims are not identical, they are not patentably distinct from each other because one of ordinary skill in the art would have found the differences between copending sets of claims obvious.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Applicant's assertion that the above applications are commonly owned in conjunction with the present application in the response of July 31, 2009 is noted. Additionally, applicant's request in the response of July 15, 2009 that the present provisional rejection be held in abeyance is noted.

### **Rejections based on Prior Art**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 7, 10, 11, 17-20, 23-26, 28-34, 37-39, 41, 45-52, 54, 55, 59-68, 70-76, 79, 80, 82 and 86-91 are rejected under 35 U.S.C. 102(e) as being anticipated by Cantor (US 2005/0164146).

Cantor discloses a dental implant 100 having a coronal end 104, an apical end forming annular surface 120 threaded external surface 112, first grooved inner surface 140 and second inner surface 130. In regard to claim 2, note stop mark 102. In regard to claim 7, the threads form a rough surface. In regard to claims 10 and 11, note Figures 13 and 14.



In response to the present rejection based on Cantor applicant has filed a declaration under 37 CFR 1.131 to establish priority to the claimed invention prior to the priority date of Cantor. The 131 declaration is ineffective with respect Cantor reference because:

(1) the Cantor published application claims the same invention as that of the present application and cannot be overcome with a 131 declaration – see 37 CFR 1.131(a)(1) and MPEP 715.05. It is noted that applicant has asserted common ownership with the published application; consequently, applicant might be entitled to the provisions of 37 CFR 1.130.

(2) paragraph 6 of the 131 declaration asserts a reduction to practice prior to January 28, 2004 wherein a dental implant corresponding to the specifications of the attached engineering drawing was constructed at applicant's direction. MPEP 715.07, however, indicates that "proof of actual reduction to practice requires a showing that the apparatus actually existed and worked for its intended purpose." While the drawings and assertion of construction tend to show that the apparatus existed, there is no reasonable showing of the second prong that the apparatus worked for its intended purpose. Additionally, it is noted that the actual reduction to practice is only asserted with respect to the embodiment in the engineering drawings and not the several different embodiments currently claimed.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 21, 27, 35, 42, 56, 69, 77 and 83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cantor (US 2005/0164146) in view of Zuest (US 5,591,029).

Zuest for a dental implant similar to that of Cantor teaches the use of multiple threading for allowing quick and solid engagement with the bone (column 15, lines 26-31) and a trephine drill 58 (Figure 7) for preparing the implant site. To have provided the Cantor implant with double threading to allow for quick solid engagement with the bone and a trephine drill to prepare the implantation site in view of the teaching by Zuest would have been obvious to one of ordinary skill in the art.

Claims 19, 20, 33, 34, 75 and 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cantor (US 2005/0164146) in view of Hansson et al (US 5,816,813).

To the extent that the threading on the Cantor implant does not meet the "micro threads" limitations of claims 19, 20, 33 and 34, Hansson et al teaches that microthreads provide for rapid bone growth (column 3, lines 36-46). To have made the Cantor threading of such a size in order to promote rapid bone growth would have been obvious to one of ordinary skill in the art.

Claims 22, 36, 40, 43, 44, 53, 57, 58, 78, 81, 84 and 85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cantor (US 2005/0164146).

The orientation of the inner grooves, the use of the Cantor device with a prior art dental bridge and the construction of the device within the particular dimensions claimed would have been obvious to one of ordinary skill in the art desiring to practice the Cantor device as a matter of routine.

#### **Response to Applicant's Remarks**

Applicant's remarks have been addressed in the rejections above.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication should be directed to **Ralph Lewis** at telephone number **(571) 272-4712**. Fax (571) 273-8300. The examiner works a compressed work schedule and is unavailable every other Friday. The examiner's supervisor, Cris Rodriguez, can be reached at (571) 272-4964.

R.Lewis  
October 26, 2009

/Ralph A. Lewis/  
Primary Examiner, Art Unit 3732